

REMARKS

In the outstanding office action, claims 1 through 8 were presented for examination. The claims were rejected under the judicially created doctrine of obviousness-type double patenting over the claims of co-pending companion case Application Number 09/553,811. In addition, rejection was advanced under 35 USC 103 on the basis of a United States patent of Russell, which deals with speech therapy systems, in view of a United States patent to Baker, which deals with speech recognition systems.

No rejection was based under 35 USC 102. Accordingly, no question of novelty is involved here and this amendment is limited to addressing questions of alleged obviousness. For reasons which will be detailed below, it is respectfully submitted that the subject invention is not obvious in view of the cited art. In addition, it is believed that the inventions claimed in the two applications are patentably distinct for reasons which will be detailed below.

The technology disclosed and claimed in the subject application has a number of advantages over the speech recognition technology disclosed by Baker, even when supplemented by the teachings of Russell. In particular, the inventive system allows one to input speech into a voice training system while working and achieving a regular level of work output. Thus, instead of a person having to devote time to do his work and then devote additional time to employ a speech therapy program, both tasks are performed simultaneously resulting in substantial savings of time, economy and profitability in the workplace.

In addition, the inventive system looks to identify particular mispronunciations of two classes. These include mispronunciations which evidence, as a result of their repetition, speech problems which call for corrective speech therapy. The other class of errors identified by the system comprises known mispronunciations, such as the mispronunciations of the word "oil" as "earl", which indicate a need for speech therapy with a high degree of certainty.

Moreover, the present invention also allows the correction of the speech model, to allow for regional type expressions or the like. Because this correction is to an internal database of known regional or other semi-acceptable mispronunciations, the

system has the advantage of maintaining system accuracy for such regionalisms or the like, as compared to the haphazard inclusion of mispronunciations into the voice model which can have broader impacts with respect to recognition of all the words and potentially lower effectiveness in recognition of the subject word in accordance with standard techniques for receiving, processing and applying voice model amendments.

In addition, the present invention implements Lessac methods in training. In particular, the subject Lessac training methods involved constructing the student to make sounds by incorporating in descriptive text reference to the sound of various musical instruments. The result is an increased level of accuracy in voice recognition.

Certainly, the synergistic time efficiencies involved in using a voice recognition program to generate data with respect to a need for speech therapy is not remotely suggested by the cited art. Indeed, Baker makes no reference to use of the computer for speech therapy. While Russell acknowledges the usefulness of speech recognition algorithms and technology in speech therapy, even with these thoughts very much in the front of his mind when he made the invention, the additional step of implementing efficiencies of time by integrating speech therapy data gathering and work using a speech recognition system is not remotely suggested by Russell, arguing strongly in favor of the fact that this additional step is not obvious. Certainly, if the invention of the present application did not occur to Russell, who after all was thinking about speech therapy and voice recognition systems, the Russell patent is perhaps the strongest evidence that the invention is not obvious.

Moreover, the time savings is not insignificant. The time necessary to gather the huge amounts of data that can result in very effective speech therapy is simply not available to people given the hurried pace of contemporary life. People have to work to make a living and have to work hard. Many people work until late at night just to get their assignments done. To take additional time for speech therapy is simply unattainable for most people. However, in accordance with the invention, simply in the process of what is for many people normal everyday work, huge amounts of data can be assembled, without cost. This data can then be used to tailor a very effective speech therapy program for the user.

But the inventive system goes beyond merely the discovery that these tasks can be integrated and time saved. In accordance with the invention, it has been recognized

that certain mispronunciations are common and speech accuracy is improved as a result. In addition, these mispronunciations also provide the basis for effective speech therapy. Another synergistic aspect of the invention is thus incorporated within the subject invention.

While the office action makes reference to column 15, lines 6-15 of Russell with respect to known mispronunciations, strictly speaking, there's no reference to known mispronunciations, but reference to merely repeatedly mispronounced words or phonemes.

Likewise, the reference to column 14, lines 16-23 of Russell with respect to receiving alphanumeric information from the person performing voice recognition while being trained this also not well supported as the cited section merely relates to the selection of correct and incorrect words curbing development of the speech model, as opposed to use of the system. In any case, the same also appears to be different for other reasons.

The system also looks for repeated mispronunciations of any time to determine patterns of speech which require speech therapy. These are also not included in the cited art.

Finally, the cited art has no teaching with respect to Lessac techniques.

The above aspects of the invention are also clearly claimed in the claims, as amended. Claim 1 (g) claims determining whether an error is a result of a known type for instance of mispronunciation.

Claim 9, 15, 16 and 19 recites the inclusion of Lessac techniques.

Claims 12, 17 and 20 recite correction of a model to accommodate a particular mispronunciation, such as the reference to regionalisms referred to above.

Claims 1 and 14 recite systems in which speech recognition and speech therapy draw from the same work which the user is doing.


Finally, with respect to the question respecting double patenting, it is noted that the subject applications were filed the same day, and, accordingly, no extension of time monopoly is involved. More importantly, however, it is also noted that the present invention is directed to a method of speech recognition and that the claims involved here will involve speech recognition software. Accordingly, the relevant prior art must be assessed in terms of its patentability with respect to speech recognition systems on

the point of the patentability of the invention as a speech recognizing method. The question is whether it is obvious to implement speech recognition given the existence of certain items in the prior art. This is in contrast to the question of the patentability of the other application on the question of whether it is obvious to implement speech therapy on the basis of the cited art. Whether the art is the same, is irrelevant. The questions are different and the assessment of patentability are different. Moreover, claims issued to speech recognition methods will not cover speech therapy methods, and thus each patent excludes the other's field of coverage.

In view of the above amendments and the discussion relating thereto, it is respectfully submitted that the instant application, is in condition for allowance. Such action is most earnestly solicited. If for any reason the Examiner feels that consultation with Applicant's attorney would be helpful in the advancement of the prosecution, he is invited to call the telephone number below for an interview.

Respectfully submitted,

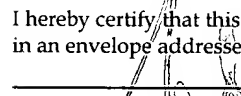
By:



Anthony H. Handal
Reg. No. 26,275
Roger Pitt
Reg. No. 46,996

HANDAL & MOROFSKY
80 Washington Street
Norwalk, CT 06854
(203) 838-8589

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on November 5, 2001



Anthony H. Handal/Roger Pitt
Reg. No. 26,275/46,996